

APPLICATION FOR APPROVAL OF UTILITY CONSTRUCTION  
ON O'BRIEN COUNTY ROAD RIGHT-OF-WAY  
Form No. 01-2022

APPLICANT:

Date \_\_\_\_\_ Name of Individual of Company \_\_\_\_\_ Tele. No. \_\_\_\_\_

Address \_\_\_\_\_ City, State \_\_\_\_\_ Zip Code Fax No. \_\_\_\_\_

incorporated under the laws of the State of \_\_\_\_\_ with \_\_\_\_\_

principal place of business in \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Submit three (3) copies of this permit application and supporting data to:

O'Brien County  
c/o County Engineer,  
155 S. Hayes Box 410  
Primghar, Iowa 51245

Phone No. 712-957-3425  
Fax No. 712-957-4740  
E-mail: Engineers@obriencounty.org

Approval is hereby requested for utility construction as follows: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(describe fully, work contemplated)

PLAT OR AERIAL PHOTO SHOWING LOCATION OF PROPOSED PROJECT AND OTHER PERTINENT INFORMATION  
SHALL BE ATTACHED TO EACH COPY OF THE APPLICATION.

The proposed line will be located as per map attached, \_\_\_\_\_ County, \_\_\_\_\_ miles

\_\_\_\_\_ from \_\_\_\_\_ more specifically described as follows:  
( N S E W ) (place, town, etc.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**AGREEMENTS: The applicant agrees that the following stipulations shall govern under this permit:**

- I. Operations in the construction and maintenance of said utility lines or appurtenances shall be carried on in such a way as to not interfere with, or interrupt traffic on said roadway. Contractor shall follow current MUTCD regulations for traffic control, signing and OSHA safety guidelines. The applicant shall take all reasonable precautions during the construction of said utility lines or appurtenances to protect and safeguard the lives and property of the traveling public and adjacent property owners and shall save the County harmless of any damage or losses that may be sustained by the traveling public or adjacent property owners on account of said utility lines or appurtenances or the \_\_\_\_\_ related construction operations. On paved roads, cable, pipe lines, and casing may be placed through the sub-grade by boring a hole just large enough to take the line. On roads not paved, an open trench may be dug and the cable, pipe line or tile line placed therein, and the trench backfilled over the line. **On all roads, when utility is placed in the ditch ROW, all entrances and intersections shall be bored or excavated to a depth of 3' below ditch elevation.** All backfilling of trenches shall be thoroughly compacted in layers of 6" or less in depth and with granular material. All work shall be done in a workman like manner, and the ground left in a neat condition satisfactory to the county engineer in charge. **Installation of underground utility lines near structures will be as shown on O'Brien County Typical Utility Layouts for bridges and culverts (attached).** The county shall be given adequate notice before the backfilling of any open trench in the roadway begins so that granular material may be delivered to the site by county forces.

The County Board of Supervisors will endeavor to give the applicant sufficient notice of any proposed construction or maintenance work, on either existing or newly acquired right-of-way, that is likely to expose, cover up, or disturb any utility appurtenances belonging to the applicant, in order that the applicant may arrange to protect his lines. The County Board of Supervisors will inform contractors, and others working in the highway right-of-way to make appropriate locate requests so that the location of the lines may be known, and so that reasonable care may be taken to avoid damaging the lines. The County assumes no responsibility, however, for failure to give such notice. It is an express condition of this permit that the applicant will assume all responsibility in the event it becomes necessary to relocate, reconstruct, or encase the applicant's lines or appurtenances in the course of the County's maintenance or construction operations.

2. The applicant will at any time, subsequent to placing the utility lines or appurtenances and at his own expense, relay, reconstruct or encase his lines as may become necessary to conform to new grades, structures, alignment, or widening of right-of-way, resulting from maintenance or construction operations by the County Board of Supervisors irrespective of whether or not additional right-of-way is acquired in connection with such highway improvement. The applicant agrees to do this promptly on order by the County Board of Supervisors, and without cost to the County. If the applicant is unable to comply promptly, the County Board of Supervisors may cause the work to be done, and the applicant will pay the cost thereof upon receipt of statement. **Responsibility for the protection of the applicant's lines or appurtenances is hereby assumed by the applicant in the event said lines or appurtenances are endangered or threatened by the maintenance or construction of the Secondary Road System by the County. Utility agrees to provide on-site presence to assist in line protection when requested by the County Engineer for County projects.**
3. The applicant shall hold the County and Board of Supervisors harmless from any damage that may result to said roadway because of the construction or maintenance of said utility lines or appurtenances and shall reimburse the County for any expenditure that the County may have to make on said roadway on account of said applicant's utility lines or appurtenances having been constructed thereon. **All breaks in tile lines due to contractors work are to be repaired or replaced at contractor's expense. Any damaged caused by utility contractor's work that has not been adequately repaired within 2 months of notice by county will be repaired and cost billed to utility.**
4. The applicant agrees to give the County Board of Supervisors forty-eight hours notice of its intention to start construction in the roadway right-of-way. Said notice shall be given to the County Engineer.
5. This permit is subject to any laws now in effect or any laws which may be hereafter enacted including regulations and administrative rules pertaining to utilities.
6. The County may make daily inspections of all underground utility installations.
7. All pressurized pipe will be bored and cased under the road according to Iowa Department of Transportation Office of Design manual 11D-1. The crossing shall be cased from toe of fore slope to toe of fore slope. The crossing shall be no more than 45 degrees from perpendicular of the roadway.

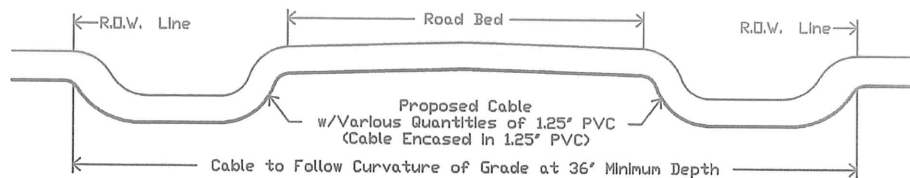
**APPROVAL:****APPLICANT:****Official Name of Utility (Long Term Owner)**By: \_\_\_\_\_  
County EngineerBy: \_\_\_\_\_  
Authorized Signature

Date \_\_\_\_\_

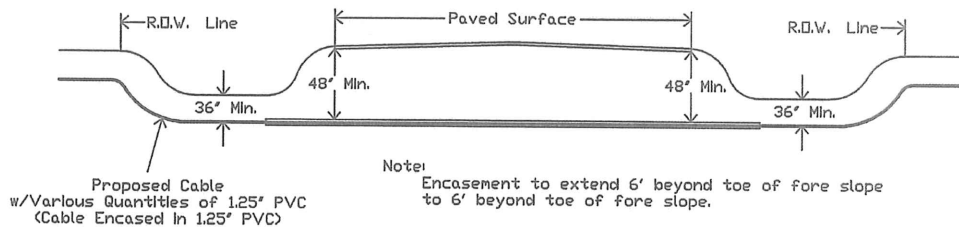
\_\_\_\_\_  
Printed name of person above\_\_\_\_\_  
Contact Person Phone No.\_\_\_\_\_  
Name of Developer if different from Long Term OwnerBy: \_\_\_\_\_  
Chairman, Board of Supervisors\_\_\_\_\_  
Authorized Signature of Developer

Date \_\_\_\_\_

Date \_\_\_\_\_

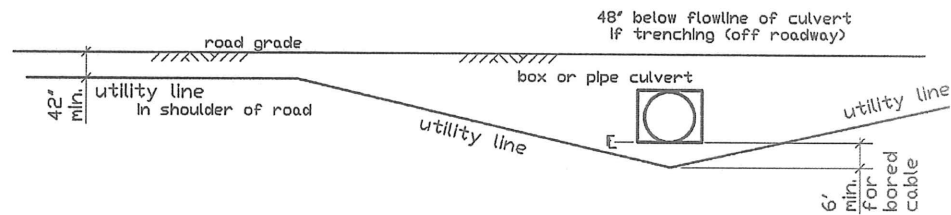
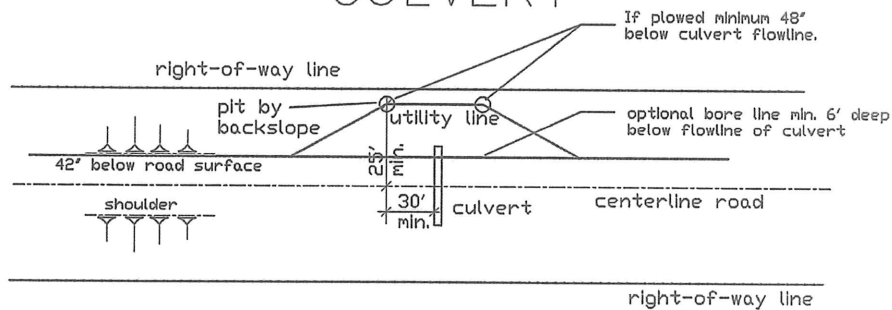


Typical Buried Cable Crossing  
Gravel or Dirt Roads



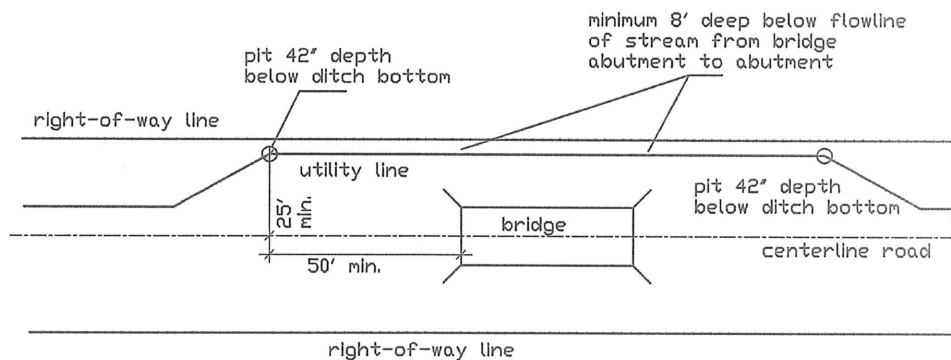
Typical Buried Cable Crossing  
Bituminous or Concrete Roads

## O'Brien County Typical Utility Layout CULVERT



## O'Brien County Typical Utility Layout BRIDGE

Form Number 01-2022



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## **Casing Pipe**

**Design Manual**

**Chapter 11**

**Miscellaneous**

Originally Issued: 06-30-09

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Utilities frequently are encased in a steel pipe when crossing under roadways or railroads. Steel casing pipe complying with ASTM A 252, Standard Specification for Welded and Seamless Steel Pipe Piles is generally used.

Depending on the timing of the installation, the casing pipe can be installed either in an open cut trench or by trenchless techniques (See Section 2554 of the Standard Specifications).

The casing pipe thickness and casing pipe diameter is to be specified on the plans.

### **Casing Thickness**

The casing pipe must have sufficient thickness to withstand both earth loads and live loads imposed from traffic above. Table 1 provides minimum recommended casing pipe thicknesses for both roadway and railroad installations. The roadway values are based on common industry standards. The railroad values are based on American Railway Engineering and Maintenance-of-Way Association (AREMA) design standards. Individual railroad standards may vary.

### **Casing Diameter**

The casing diameter should be sized to provide a minimum of 4 inches (100 mm) between the inside of the casing pipe and the largest outside diameter of the carrier pipe (including pipe bells) to allow for deflection of the casing pipe and installation of casing spacers.

**Table 1: Minimum Casing Pipe Thickness**

NOMINAL DIAMETER INCHES (mm)*	WALL THICKNESS, MINIMUM INCHES (mm)	
	UNDER HIGHWAY	UNDER RAILROAD
6 thru 14 (150 thru 355)	0.188 (4.78)	0.25000 (6.35)
16 (465)	0.188 (4.78)	0.28125 (7.14)
18 (450)	0.25 (6.35)	0.31250 (7.94)
20 (510)	0.25 (6.35)	0.34375 (8.73)
22 (560)	0.25 (6.35)	0.34375 (8.73)
24 (600)	0.281 (7.14)	0.37500 (9.53)
26 (660)	0.281 (7.14)	0.40625 (10.32)
28 (710)	0.312 (7.92)	0.43750 (11.11)
30 (750)	0.312 (7.92)	0.46875 (11.91)
32 (815)	0.312 (7.92)	0.50000 (12.70)
34 (865)	0.312 (7.92)	0.53125 (13.49)
36 (900)	0.344 (8.74)	0.53125 (13.49)
38 (965)	0.344 (8.74)	0.56250 (14.29)
40 (1015)	0.344 (8.74)	0.59375 (15.08)
42 (1050)	0.344 (8.74)	0.62500 (15.88)
44 (1120)	0.344 (8.74)	0.65625 (16.67)
46 (1170)	0.344 (8.74)	0.65625 (16.67)
48 (1200)	0.344 (8.74)	0.68750 (17.46)
50 (1270)		0.71875 (18.26)
52 (1320)		0.75000 (19.05)
54 (1370)		0.78125 (19.84)
56 (1420)		0.81250 (20.64)
58 (1470)		0.81250 (20.64)
60 (1525)		0.84375 (21.43)
62 (1575)		0.87500 (22.23)
64 (1625)		0.90625 (23.02)
66 (1675)		0.93750 (23.81)
68 (1725)		0.93750 (23.81)
70 (1780)		0.96875 (24.61)
72 (1830)		1.00000 (25.40)

Note: Minimum thicknesses assume a minimum of 4.5 feet (1.37 m) of cover over the top.

\* Additional casing diameters are available.